

# NORTHERN SÁMI CAUSATIVES AND THE DATIVE PARAMETER

Mikael Vinka

McGill University

## 1. Introduction

This paper discusses some aspects of causative constructions in Northern Sámi, a Finno-Ugric language spoken in Northern Scandinavia. When we carefully examine causatives, we are able to distinguish two subtly different dialects, that I will call A (NSA) and B (NSB). Dialect A has been described in Nickel (1994) and my own field-work, and dialect B has been described in Julien (1995) and (1996). (1a) shows that a causative is well formed in both dialects if the Dative Causee precedes the Accusative Object. However, if the Accusative Object occurs to the left of the Causee, as in (1b), then we find that this results in illformedness in dialect B (M. Baker, p.c. But see footnote 5). (1b) is, however, perfectly fine in dialect A. Moreover, (1c) shows that the Theme may be promoted to Subject in a passivized causative in dialect A, but not in dialect B:

- (1)
- |   | NSA | NSB |  |
|---|-----|-----|--|
| a | ✓   | ✓   | Elle čáli-h-ii Bierai reivve. (Julien 1996:161)<br>Elle.NOM write-CAUSE-PST.3SS Bier.DAT letter.ACC<br>'Elle made Biera write a letter.'   |
| b | ✓   | *   | Elle čáli-h-ii reivve Bierai. <sup>1</sup><br>Elle.NOM write-CAUSE-PST.3SS letter.ACC Bier.DAT<br>'Elle made Biera write a letter.'        |
| c | ✓   | *   | Reive čáli-h-uvvui Bierai. (M.Julien, p.c)<br>letter.NOM read-CAUSE-PASS.PST.3SS Bier.DAT<br>'A letter was caused to be written by Biera.' |

A further word order difference between the two dialects is found in the possibility for Dative Subjects in passivized causatives. As (2) illustrates, dialect A allows the Dative Causee to be promoted to Subject in a passive. But also as seen in (2), this is impossible in dialect B

- (2)
- |  | NSA | NSB |   |
|--|-----|-----|---|
|  | ✓   | *   | Bierai čáli-h-uvvui reive. (M.Julien, p.c)<br>Biera.DAT write-CAUSE-PASS.PRS.3SS letter.NOM<br>'Biera was made to write a letter' |

I propose that Northern Sámi A and Northern Sámi B differ with respect to the setting of one specific micro-parameter, that will I call the Dative Parameter, stated in (3).

I wish to thank the audience at the 1998 Mid-America Linguistics Conference for valuable comments, questions and discussion. I am especially indebted to Mark Baker, who has followed this research from the very beginning. I also thank Jonathan Bobaljik, Nigel Duffield, Hiro Hosoi, Marit Julien, Mikael Svonni and Lisa Travis. Remaining errors, inadequacies, misinterpretations of data etc. all belong to me. This research was supported by FCAR grant (97ER0578) 'On Syntactic Categories' to Mark Baker, Jonathan Bobaljik, Claire Lefebvre and Lisa Travis, to which I am grateful. Unless otherwise indicated, the examples in this paper are taken from my own field notes.

<sup>1</sup>The ill formedness of (1b) in NSB was originally pointed out to me by M. Baker. (1b) is fine under the irrelevant reading 'Elle made someone write a letter to Biera.' (1a) is ambiguous. (1c) is also OK if the Dative DP is a goal.

- (3) THE DATIVE PARAMETER  
 If a language has Dative Case marking, then the Dative is realized either  
 (i) as a particular nominal (D) feature, or  
 (ii) as a syntactically visible Case feature.

Datives that are instantiated in accordance with (3i) will be shown to be transparent to Case-motivated applications of Attract, since they do not carry a Case feature. Also, they may serve as Subjects. Hence Dialect A represents (3.i). However, Datives instantiated in accordance with (3.ii), constitute barriers to Case-driven applications of Attract, and they can not serve as Subjects. Thus Dialect B represents (3.ii).<sup>2</sup>

The paper is organized as follows. Section 2 discusses Dative Subjects. Section 3 is concerned with Object Scrambling. Section 4 deals with Passivization and section 5 provides some concluding remarks.

## 2. Dative Subjects

As is well known, languages with overt marking of Dative Case do not behave uniformly with respect to whether Datives are licit as Subjects or not. For instance, Icelandic freely allows a Dative DP to serve as a Subject, in contrast to German (cf. Zaenen, Maling & Thrainsson 1990 and Freidin & Sprouse 1991). As we saw in (2) above, Northern Sámi A and B appear to differ in a similar fashion.

In order to determine the Grammatical Function of the NSA Dative DP in (2), we refer to Zaenen, Maling & Thrainsson (1990), who presented a number of syntactic tests that single out Subjects from other constituents in Icelandic. For example, only Subjects can undergo Subject-raising. If we embed a Dative-initial infinitival clause under a raising verb, we find that the Dative DP in dialect A can move into the matrix Subject position, as shown in (4). This provides evidence that the Northern Sámi A Dative DP in (2) is a Subject rather than some preposed constituent.<sup>3</sup>

- (4) NSA  
 ✓ Bierai orru čáli-h-uvvo-me reive.  
 BierA.DAT seem.PRS.3SS write-CAUSE-PASS-ACTLOC letter.NOM  
 'You were made to read a book.'

How does the Dative Parameter account for the different possibilities for Dative Subjects in Northern Sámi A and B? Let us begin with dialect A. According to our hypothesis, Dative Case in this dialect is simply a D feature. In other words, the feature composition of a Northern Sámi A Dative DP closely resembles the English expletive *there* (cf. Chomsky 1995:287). Chomsky claims that *there* has a D feature, but crucially lacks a Case feature, and therefore it can only check D features. If we consider a sentence with a Dative Subject like (2) or (4), it seems reasonable to assume that the Dative Causee satisfies the EPP, which I assume involves the checking of a strong

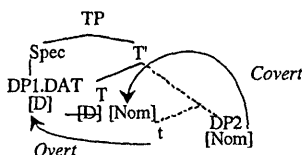
<sup>2</sup>In this paper I will have nothing to say about Datives of the kind found in Japanese or Faroese. In these languages, Dative argument DPs may be promoted to subjects in passives, accompanied by a case-alternation. We should also notice that there is a third dialect of Northern Sámi, where the Causee always takes accusative case. In this dialect, only the Causee may be promoted to subject in passives, and A-scrambling of the object of the base verb is impossible.

<sup>3</sup>Further evidence is found in Control possibilities. (i) shows that PRO may correspond to a Dative DP in NSA:

(i) Mus lea várra [PRO loga-h-uvvot girji]  
 I.loc be.prs.3sS hope.sg.nom read-Cause-Pass.Pst book.Nom  
 'I hope to be made to read a book.'

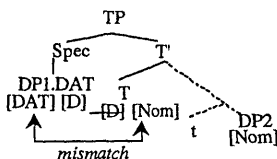
D feature of T. Hence the EPP is divorced from Case. This is illustrated in (5). Since the Dative DP1 lacks a Case feature, it fails to check the Nominative feature of T. Following Chomsky (1995) and Collins (1997), the Nominative feature is weak and therefore it can attract the Nominative DP2 covertly.

(5)



In Northern Sámi B, on the other hand, Dative is a syntactically realized Case feature. Consider the representation in (6) for example (2). In (6) the Dative NP has moved into the Spec of TP as a result of the EPP. Notice now, that the Case features of DP1 and T are in a checking configuration. Chomsky (1995: 308-9) and Collins' (1997:21), claim that the checking of a feature cannot be delayed if a checking configuration has been created. With respect to (6), it is important to pay attention to the fact that the *values* of the two Case features are different, namely Nominative versus Dative. This, I claim, constitutes a feature-mismatch, and in accordance with Chomsky (1995:309), a derivation is canceled if a feature-mismatch arises, as stated in (7). These assumptions put together implies that the Nominative feature of T must be checked against the accessible Case feature of the DP in the specifier of T. But checking cannot obtain since the values of the Case features fail to match. Hence the derivation is canceled.

(6)



(7)

Mismatch of features cancels the derivation.

Chomsky (1995:309)

In this section we have shown that Northern Sámi A and B differ with respect to their ability to license Dative Subjects. We have argued that this difference reflects a parametric difference.

### 3. Object Scrambling and the Lack of It

In this section I will discuss Object scrambling. Recall from example (1b) that Object scrambling is allowed in dialect A, but not in dialect B. It is important for our understanding of both dialects, to determine the nature of Object scrambling in dialect A.

In order to tease out the properties of Object scrambling in Dialect A, we will consider A-binding possibilities. In the sentences in (8), the Causee precedes the Theme, and the Causee serves as the A-binder of the anaphor contained in the Theme. Notice that anaphoric elements in

Northern Sámi agree with their antecedents. Thus, in (8a) the Causee is dual and therefore the anaphor surfaces with dual morphology. In (8b) the Causee is a plural pronoun and the anaphor displays plural morphology.

- (8) a Mun doala-h-an [Márehii ja Birehii] [*gudeſge guoibmá-me<sub>i</sub>* beatnagiid].  
I.NOM hold-CAUSE-PRS.1SS Máret.DAT and Biret.DAT each other.GEN-2DPOSS dogs.ACC  
'I make Máret and Biret hold each other's dogs.'  
b Áhčč*i* daga-h-ii daidda<sub>i</sub> [*gudeſge guoibmá-me<sub>i</sub>* *niibiid*].  
father.NOM repair-CAUSE-PST.3SS they.DAT each other.GEN-3PPOSS knives.ACC  
'Father made them repair each other's knives.'

If Object scrambling is A'-movement, then we expect to find reconstruction effects in scrambled sentences. However, as shown in (9), no such effect found. In (9) the Theme has scrambled across the Causee, and as we can see, the binding relation that holds in (8) is destroyed when scrambling has applied.

- (9) a \*Mun doala-h-a [*gudeſge guoibmá-me<sub>i</sub>* beatnagiid] [Márehii ja Birehii] *t<sub>j</sub>*.  
I.NOM hold-CAUSE-PRS.3SS each other.GEN-3DPOSS dog.PL.ACC Máret.DAT & Biret.DAT  
'I make Máret and Biret hold each other's dogs.'  
b \*Áhčč*i* daga-h-ii [*gudeſge guoibmá-me<sub>i</sub>* *niibiid*] daidda<sub>i</sub> *t<sub>j</sub>*.  
father.NOM repair-CAUSE-PST.3SS each other.3PPOSS knives.ACC they.DAT  
'Father made them repair each other's knives.'

We now turn to (10). Here we can see that the scrambled Object may become the antecedent of an anaphor contained within the Causee. This, then, indicates that the Theme has undergone A-movement and that it c-commands the anaphor.

- (10) a Mun doala-h-a beatnagiid<sub>i</sub> [*gudeſge guoibmá-me<sub>i</sub>* *eaiggádii*] *t<sub>j</sub>*.  
I.NOM hold-CAUSE-PRS.1SS dogs.ACC each other.GEN-3PPOSS owner.DAT  
'I make the dogs be held by each other's owner.'  
b Mun čajeha-htt-en máná<sub>i</sub> [*iežas<sub>i</sub>* *vielljai*] *t<sub>j</sub>*.  
I.NOM show-CAUSE.PST.1SS child.ACC self.GEN.3SPOSS brother.DAT  
'I made the child be shown by its own brother.'

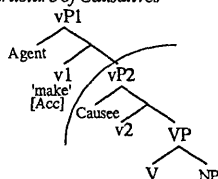
To complete the picture, in (11) the scrambling of (10) is undone, and the result is that the Theme cannot bind the Causee. The contrast between (10) and (11) clearly shows that Object scrambling affects the possibilities for A-binding, and therefore should count as A-movement:

- (11) a \*Mun doala-h-a [*gudeſge guoibmá-me<sub>i</sub>* *eaiggádii*] beatnagiid<sub>i</sub>.  
I.NOM hold-CAUSE-PRS.1SS each other.GEN-3PPOSS owner.DAT dogs.ACC  
'I make the puppy to be held by its owner.'  
b \*Mun čajeha-htt-en [*iežas<sub>i</sub>* *vielljai*] máná<sub>i</sub>.  
I.NOM show-CAUSE.PST.1SS self.GEN.3SPOSS brother.DAT child.ACC  
'I made its own brother show the child.'

Before we turn to the analysis, I should spell out a few assumptions. To begin with, I follow Baker (1988) and analyze the causative morpheme as a verb. Moreover, based on insights by Li (1990) and Baker (1995), I assume that the causative verb takes a bare vP as its complement. In the structure in (12) these are labeled vP1 and vP2 respectively<sup>4</sup>.

<sup>4</sup>Higher functional projections are not included in the tree diagrams, since they are not relevant for our discussion. But of course, we have to assume that the DP that serves as subject has moved out of the VP-complex into Infl.

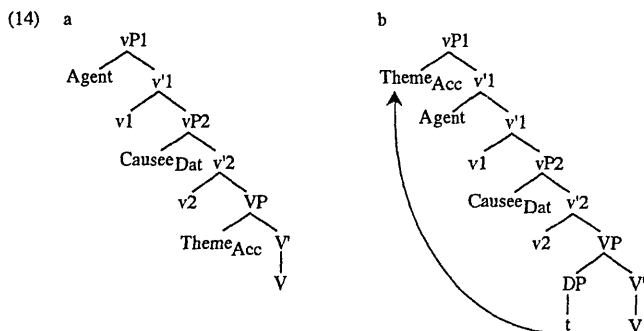
(12) *Basic Structure of Causatives*



Now, a quick word concerning so-called Case-Preservation effects. Following Baker (1995), Larson (1988), to mention a few, I assume that in order for a verb to check (or assign) Accusative Case, it must receive the right kind of functional support. As stated in (13), this means that the verb must be selected by say Infl. So, although it is a necessary requirement that a Case feature [Acc] be licensed by *v*, it is not a sufficient condition. Hence only *v*1 in (12) is, descriptively speaking, a Case-assigner.

- (13) LICENSING PRINCIPLE FOR STRUCTURAL CASE  
In order to license structural Case, *v* must receive functional support from Infl.  
(cf. Baker 1995, Larson 1988, Abney 1987 etc.)

Let us now turn to the structures in (14). I assume that a non-scrambled causative in Northern Sámi has the schematic representation (14a). Now, following Chomsky (1995), I assume that the Case features of verbs may be overtly checked in a multiple spec configuration<sup>5</sup>. The structure (14b) illustrates a causative where Object scrambling has applied. Since we have established, that scrambling is A-movement, and since Case is a potential source for A-movement, I assume that the base-object has moved into a Specifier of *v*1, overtly checking Accusative Case. These representations are fully compatible with binding facts presented above.



<sup>5</sup>Notice that nothing in particular hinges on the use of multiple specifiers. What is important is the fact that A-movement of the Theme can target some position that is higher than the position of the Causee.

But now, why is (14b) OK in Northern Sámi A, but not in Northern Sámi B?<sup>6</sup> According to the hypothesis we started out with, Dative-Case in dialect A is not a Case, but rather a D feature. As for Dialect B, we claimed that Dative indeed is a full-fledged Case feature. Let us now consider the consequences of this hypothesis, by turning to the definitions of Attract and Closeness, given in (15) and (16):

- (15) ATTRACT F (Chomsky 1995:297)  
K attracts F if F is the closest feature that can enter into a checking relation with a sublabel of K.
- (16) CLOSENESS (Chomsky 1995: 356)  
If b c-commands a and t is the target of raising, then b is *closer to* K than a unless b is in the same minimal domain as (a) t or (b) a.

Chomsky (1995:297) claims that a sublabel of a head attracts a feature of a DP in order to check the features of the head. Moreover, let us assume that the feature of the head attracts *a feature of the same kind* associated with the DP. That is, if the attracting feature is a Case feature, then it attracts another Case feature. Consider the scenario where the Case feature of v1 in (14) attracts another Case feature. If, by hypothesis, the Causee in dialect A lacks a Case feature, then the Case feature of the Theme is the closest candidate to be attracted, by the definition of Closeness in (16). Consequently, the Theme can raise across the Causee in dialect A, as further illustrated in (17):

- (17)
- $$\begin{array}{c} [_{vP1} \text{ V-Cause } [_{vP2} \text{ DP}_{\text{Dat}} [_{vP} \text{ DP } ]]] \\ | \qquad \qquad \qquad | \\ [\text{ACC}] \longleftarrow [\text{ACC}] \end{array}$$

However, if Dative is realized as a syntactic Case feature, as in Northern Sámi B, then the locality condition imposed on Attract, prevents the Theme from being attracted. This is so for the simple reason that the Causee c-commands the Theme, and the two are not in the same minimal domain. In other words, the Causee constitutes a barrier for movement of the Theme, as illustrated in (18):

- (18)
- $$\begin{array}{c} * [_{vP1} \text{ V-Cause } [_{vP2} \text{ DP } [_{vP} \text{ DP } ]]] \\ | \qquad \qquad \qquad | \qquad \qquad | \\ [\text{ACC}] \qquad \qquad [\text{DAT}] \qquad \qquad [\text{ACC}] \end{array}$$

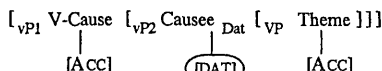
Now, of course, the question arises how the Accusative Case of the Theme in dialect B could be checked at all? If overt checking is blocked in (18), then it should be equally blocked covertly. In order to get around this problem, I refer to a suggestion by Fukui & Takano (1997), who argue that certain types of morphological Cases are visible to the application of Spell-Out, and stripped off by Spell-Out, which gives us the assumption (19):

- (19) Case morphology makes a Dative Case feature visible to Spell-Out.  
(Based on Fukui and Takano 1997:32).

<sup>6</sup>However, it has just recently been pointed out to me by Marit Julien (p.c) that (1b) is not as bad in dialect B as it was first thought to be. It remains however to be established whether object-scrambling displays A-, or A'-properties. If it has A-properties, then the account given in this paper has to be revised. If it has A'-properties, then our account still holds.

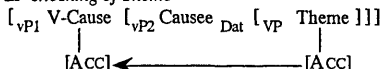
(19) renders pre-spell-out checking of Accusative impossible in dialect B, just as shown in (18). However, assume now that Spell-Out strips off the Dative Case feature from the Causee, as shown in (20a). This has the effect of enabling checking of Accusative Case at LF in dialect B, as shown in (20b):

(20) a "Checking" by Spell-Out



↓  
Spell-Out

b *LF checking of Theme*



In this section I have shown that Object scrambling in Northern Sámi A is an instance of A-movement. This in turn made us draw the conclusion that somehow this A-movement is blocked in Dialect B. We have attributed this to the Dative Parameter, which enables us to find a non-coincidental connection between Object scrambling and Dative Subjects.

#### 4. Passives

The example in (21) illustrate the same point as example (1c), namely the fact that causatives based on transitive base verbs can be passivized in dialect A, but not in dialect B.

- (21)            NSA    NSB  
                  ✓        \*  
                  Láibi        bora-h-uvvo                   mánnái.    (Julien 1995:82)  
                  bread.NOM eat-CAUSE-PASS.PRS.3SS child.DAT  
                  'The bread is caused to be eaten by the child.'

I will claim that passivization of causatives in dialect B is impossible, since this would involve A-movement of the Theme across the Causee. I.e. (21) is bad in dialect B for the same reason that Object scrambling is bad in that dialect. We now predict that if no Dative DP is found intervening between the matrix Subject position and the Accusative Object, then passivization should be fine also in dialect B. Consider (22a). Here the base verb is intransitive, and as is common in many languages, the single argument of the base verb shows up with Accusative Case irrespective of its thematic status. Turning to the passive in (22b), we find that it is well formed not only in dialect A, but also in B:

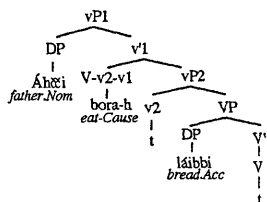
- (22)            NSA    NSB  
                  ✓        ✓  
                  Beana        čieru-ha                   máná.                   (Julien 1996:162)  
                  dog.NOM cry-CAUSE.PRS.3SS child.ACC  
                  'Joavvna causes the child to cry.'  
                  b        ✓        ✓  
                  Mána        čieru-h-uvvui.                   (Julien 1996:162)  
                  child.NOM cry-CAUSE-PASS.PST.3SS  
                  'The child was caused to cry.'

However, the most striking piece of evidence that it is the presence the Dative DP that causes the ungrammaticality of (21) in dialect B, reveals itself when we consider the possibility for Causeless causatives. The possibility of suppressing the Causee is a common phenomenon, found in a wide range of unrelated languages, such as Germanic and Bantu. Also Northern Sámi has this option. If the Causee is suppressed, it is nevertheless implicit, and is interpreted as *someone*. Thus in (23), someone other than the causative Agent eats the bread:

- (23) NSA NSB  
 ✓ ✓ Áhčči bora-h-a láibbi. (Julien 1995:82)  
 father.NOM eat-CAUSE.PRS.3SS bread.ACC  
 'Father makes *someone* eat the bread.'

Let us stipulate the (partial) representation (24) for (23). As (24) shows, no Agent is generated in vP2. However, the head v2 is still syntactically present, ensuring that the base verb is transitive, and therefore also retains the agentive interpretation of the verb. A similar proposal, however based on somewhat different theoretical assumptions, has been made in Taraldsen (1991). What is interesting about Causeless causatives in Northern Sámi B is the fact that they may be passivized, unlike cases where the Causee is present. Consider the passive in example (25). As we can see it is well formed in both dialects.

(24)



- (25) NSA NSB  
 ✓ ✓ Láibbi bora-h-uvvui. (Julien 1995:203)  
 bread.NOM eat-CAUSE-PASS.PST.3SS  
 'Bread was made to be eaten by someone.'

The well formedness of example (25) in dialect B provides good evidence that it is the presence of a Dative Causee that blocks passivization in the dialect B example (21).

Let us now consider an additional quirk of passives in Northern Sámi A. In example (26), we have an active infinitival causative clause embedded under an ECM verb. As (26a) shows, the Subject of the embedded clause can appear with Accusative Case. And as (26b) shows, the sentence is bad if the embedded Subject surfaces with Nominative Case; hence Accusative marking is mandatory. This is hardly surprising, since the standard assumption is that the embedded infinitival clause lacks a source for Nominative Case. However, turning to (27), things become a little bit more interesting. In (27), the infinitival complement clause is passivized. In (27a) the Theme argument has been promoted to Subject, but notice that it is not possible for the Subject to surface with Accusative Case. Rather, as (27b) shows, the Theme must surface with Nominative Case, even though the embedded clause is infinitival:

- (26) a Máhtte vurddi [mu loga-hit dutnje girjji].  
 Máhtte.NOM expect.3SS.PST I.ACC read-CAUSE.INF you.DAT book.ACC  
 'Máhtte expect me to make you read the book.'

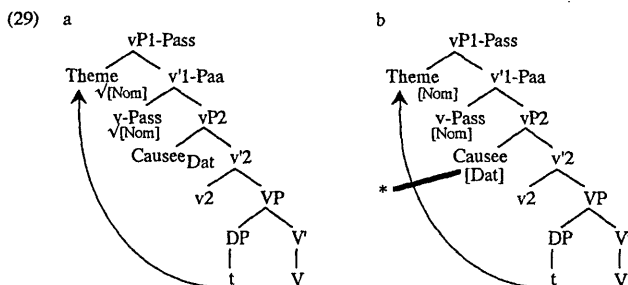


- (27) b \*Máhtte vurddi [mun loga-hit dutnje girjji].  
 Máhtte.NOM expect.3sS.PST I.NOM read-CAUSE.INF you.DAT book.ACC  
 'Máhtte expect me to make you read the book'  
 a \*Máhtte vurddi [girjji loga-h-uvvot dutnje].  
 Máhtte.NOM expect.3sS.PST book.ACC read-CAUSE-PASS.INF you.DAT  
 'Máhtte expect the book to be made to be read by you'  
 b Máhtte vurddi [girji loga-h-uvvot dutnje].  
 Máhtte.NOM expect.3sS.PST book.NOM read-CAUSE-PASS.INF you.DAT  
 'Máhtte expect the book to be made to be read by you'

These examples clearly show that a passivized sentence in Sámi has some source for Nominative Case that is not found in active clauses. I propose that a Nominative Case feature is licensed by the passive morpheme, and that it may be realized in the passivized verb or in Infl, as stated in (28). I also make the additional assumption that if Nominative occurs in Infl, then it is weak, (28..i) but if it occurs in the passive V, then it is strong, (28.ii). (28.i) is thus relevant for the previous discussion in Section 2.

- (28) Nominative Case can occur in Infl or in V-Passive.  
 (i) If the feature [Nom] is in Infl, then it is weak.  
 (ii) If the feature [Nom] is in V-Pass, then it is strong.

Consider now the derivations in (29), where the Nominative feature occurs in the passivized v. By assumption (28.ii), the Nominative feature is strong, and hence attracts overtly. In Northern Sámi A, the Nominative Theme can be attracted by the Nominative feature of the passivized verb, as shown in (29a), since the Causee lacks a Dative Case feature. However, turning to dialect B, where the Dative Causee is taken to carry a Case feature, we find that the Theme no longer counts as closest for the purposes of Attract, and therefore it can not raise. However, since the Nominative feature of the verb is strong, it must be checked before Spell-Out, but it can't. Therefore the derivation crashes, or is canceled.



## 5. Conclusion

In this paper I have argued that the two dialects of Northern Sámi differ with respect to how Dative Case is realized. I have proposed that Dative Case can be realized either as a particular kind of D feature, or as a syntactic Case feature. I have argued that the Dative Parameter has consequences not only for the possibility for Dative Subjects, but also for what we may loosely refer to as long-distance A-movement.

While I have mentioned parallels with German and Icelandic, it is obvious that the proposal must stand up to testing against a wider range of languages. However, the major descriptive purpose of this study has been to undertake an investigation of a fairly unstudied language.

### *References*

- ABNEY, S. P. 1987. The English Noun Phrase in its Sentential Aspect. Ph.D., MIT.
- BAKER, M. 1988. *Incorporation*. Chicago: Chicago University Press.
- \_\_\_\_\_. 1995. *The Incorporation Theory of Morphosyntactic Alternations*. McGill University: Ms.
- CHOMSKY, N. 1995. *The Minimalist Program*. Cambridge, Mass: MIT Press.
- COLLINS, C. 1997. *Local Economy*. Cambridge, Mass: MIT Press.
- FREIDIN, R. & R. A. SPROUSE. 1991. *Lexical Case Phenomena. Principles and Parameters in Comparative Grammar*. Ed. R. FREIDIN. Cambridge, Mass: MIT Press.
- FUKUI, N. & Y. TAKANO. 1997. Symmetry in Syntax: Merge and Demerge. *Journal of East Asian Linguistics*: 1-60.
- JULIEN, M. 1995. *Syntactic Word Formation in Northern Sámi*. Ph.D. Universitet i Tromsø.
- \_\_\_\_\_. 1996. An Incorporation Analysis of Northern Sámi Causatives. *Proceedings of the 13th Eastern States Conference on Linguistics*. Ed. A. Green & V. Motapanyane. Ithaca, NY: CLC Publications.
- LARSON, R. 1988. On the Double Object Construction. *Linguistic Inquiry* 19.3: 335-391.
- LI, Y. 1990. X-Zero Binding and Verb Incorporation. *Linguistic Inquiry* 21.3: 399-426.
- NICKEL, K. P. 1994. *Samisk Grammatikk*. 2 ed. Karasjok: Davvi Girji.
- TARALDSEN, K.-T. 1991. A Directionality Parameter for Subject-Object Linking. *Principles and parameters in comparative grammar*. Ed. Robert Freidin. Cambridge, Mass: MIT Press.
- ZAENEN, A. J., MALING. & H. THRÁINSSON. 1990. Case and Grammatical Functions: the Icelandic Case. *Syntax and Semantics* 24: 95-136.